

Memo

To: Board of Managers
From: Michael Younes, Director of Municipal Operations *[Signature]*
CC: Shana Davis-Cook, Village Manager
Date: 3/5/2014
Re: Update on LED Streetlight Pilot Program

Status Update

At the December 9, 2013 Board meeting, staff received unanimous approval to proceed with establishing a pilot program to evaluate the effectiveness of PEPCO's new LED streetlights. The pilot program consisted of converting twenty-three (23) existing High Pressure Sodium (HPS) streetlights to various types of LED streetlight fixtures and replacing seven (7) existing streetlights' flat optical lenses with drop or "sag" lenses, for a total cost of \$19,186.

During the month of February, PEPCO contractors installed all but nine (9) of the new LED streetlights. During construction, PEPCO's engineering department was notified by the contractor that the nine (9) tear-drop fixtures would not fit the existing brackets (arms) on the pole. In order to make the teardrop fixtures fit, the existing streetlight arms would need to be replaced.

Cost Adjustment

Accordingly, PEPCO has submitted a work order for Village approval to provide and install the nine (9) required arms for an **additional cost of \$11,562**, which includes the arm, wiring and labor. Since this was an error by PEPCO's engineering department, I was able to negotiate with PEPCO to **discount the price by 43%** thereby only paying for the material cost of the new arms (**\$733.88 each**).

Staff Recommendation

Overall resident and Village Police officer feedback has been very positive thus far on the LED light output. One concern staff has received is in reference to comparing the light

output and dispersion pattern on similarly spaced lights. In order to address this concern, staff recommends modifying the pilot locations and type of fixtures along West Kirke Street between Connecticut Avenue and Magnolia Parkway. Staff does not recommend modifying the configurations of the streetlights along East Lenox Street (between Connecticut Avenue and Brookville Road) since there are only 3 streetlights on this block and an even light configuration could not be achieved.

By modifying the pilot locations, two (2) different types of LED fixtures (teardrop vs. cobra-head) can be seen side-by-side. Additionally, this will reduce the outlay for the teardrop mounting arms, because only 6 of the 9 arms will be needed. Below is a list of the remaining LED streetlights to be installed based on staff's recommendation:

- East Lenox Street (between Connecticut Avenue and Brookville Road):
 - Three (3) – 100W teardrop LED fixtures
- West Kirke Street (between Connecticut Avenue and Magnolia Parkway):
 - Three (3) – 100W teardrop LED fixtures
 - Three (3) – 100W cobra-head LED fixtures

This modification would require further Board authorization of \$4,403. Currently, there is sufficient budget within the FY2014 budget.

Board Action

If the Board wishes to proceed with modifying the Village's LED Pilot Program pursuant to staff's recommendation, staff requests authorization to direct PEPCO to install six (6) teardrop mounting arms as outlined above at a **total cost of \$4,403.**

Attachments

Cost Adjustment Letter from PEPCO
Map of Modified Pilot Locations



Distribution Engineering, Maryland Division
201 West Gude Drive
Rockville, Maryland 20850
Telephone: 301-670-8700
Fax: 301-670-8718

February 28, 2014

Village of Chevy Chase, Maryland
5906 Connecticut Avenue
Chevy Chase, MD 20815
Attn: Mr. Michael Younes, Director of Municipal Operations

Re: Streetlight brackets installation at:
W. Kirke Street / E. Lennox Street
Work Request # 3445300, in association with Work Request #3433410

Dear Mr. Younes,

Under Pepco work request # 3433410, you have requested pepco to convert 23 HPSV existing overhead street lights to 14 cobra-head and 9 tear-drop LED overhead streetlights. The job didn't call for the replacement of the brackets, but just to switch out the light boxes. The cost for this job was \$16,634.00 in which you have committed to it.

During construction, our engineering department had been notified that the 9 tear-drop LED lights wouldn't fit into the existing brackets; hence, a new work request #3445300 had been created to include the removal of the existing brackets, the installation of new brackets, and the wires connecting the lights from the poles, in which amount to \$11,562.00. This figure was communicated to you and thereafter we had talked over the phone. I had made the decision to modify the cost to eliminate all removal cost and wire cost (i.e. labor) and just leave the 9 new brackets (materials only) and the cost came out to be \$6,605.00. Additional instruction had been received from you that you only want 6 of the 9 proposed new brackets to be changed for the tear-drop and 3 will be installed with cobra-head with existing brackets. This resulted in the latest cost of \$4,403.00.

With that, we propose to replace 6 existing overhead street light brackets to 6 new brackets for the installation of 6 tear-drop LED overhead streetlights for the cost of \$4,403.00.

An acceptance signature on this proposal will constitute a legal obligation to pay for the cost designated herein. Upon receipt of a signed copy of this proposal and payment in full, we will proceed to furnish and install the necessary facilities.

Sincerely,

A handwritten signature in black ink, reading "Glaister F.G. Downie". The signature is stylized with a large, looped "G" and a prominent "D".

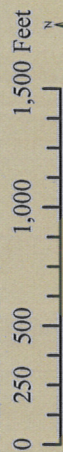
Glaister F.G. Downie
Service Associate
Distribution Engineering -MD
Telephone: (301) 548-4347

Accepted by: _____

Title: _____

For: _____

Date: _____



Complied by: M. Younes 3/4/2014
Source: Chevy Chase Village

LED Streetlight Pilot Locations

Legend

- 70W Cobra head LED Fixture
- 100W Cobra head LED Fixture
- 100W Teardrop LED Fixture
- Sag Lens Conversion Only